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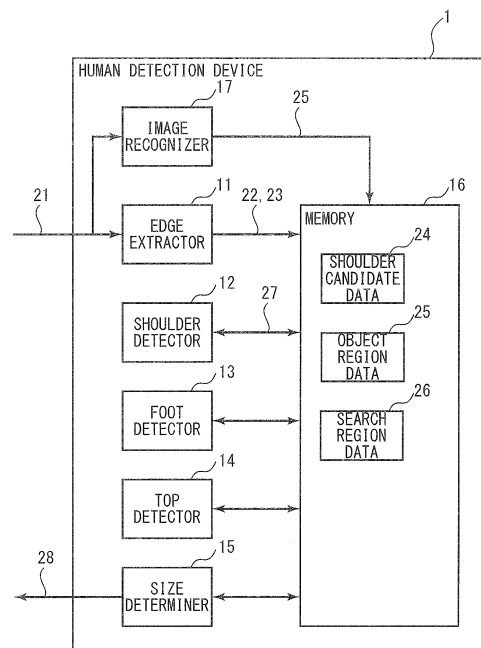
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(54) **Human detection device**

(57) In a human detection device 1, an edge extractor 11 carries out edge extraction processing to an input image 21 and produces a horizontal edge image 22. A shoulder detector 12 detects a shoulder center and a shoulder width of a person included in the input image 21. A foot detector 13 detects a foot position of the person based on the detected shoulder center and shoulder width. A top detector 14 detects a top position of the person based on the detected shoulder center and shoulder width. A size determiner 15 determines a horizontal size of the person based on the detected shoulder width and determines a vertical size of the person based on the detected foot position and top position. The size determiner 15 produces human range data 28 including the determined sizes, the shoulder center position, the foot position, and the top position.

FIG. 1



**PARTIAL EUROPEAN SEARCH REPORT**

Application Number

under Rule 62a and/or 63 of the European Patent Convention.
This report shall be considered, for the purposes of
subsequent proceedings, as the European search report

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2005/232491 A1 (CHANG PENG [US] ET AL) 20 October 2005 (2005-10-20) * paragraph [0033] - paragraph [0044]; figure 13 *	22-24	INV. G06K9/00
X	US 2008/123968 A1 (NEVATIA RAMAKANT [US] ET AL) 29 May 2008 (2008-05-29) * paragraphs [0020] - [0031], [0060] - [0067], [0076] - [0078]; figures 1-3, 5B *	22-24	
X	GB 2 431 718 A (SONY UK LTD [GB]) 2 May 2007 (2007-05-02) * page 7 - page 13; figures 1-4 *	22-24	
X	US 2006/098865 A1 (YANG MING-HSUAN [US] ET AL) 11 May 2006 (2006-05-11) * paragraphs [0043] - [0047]; figure 7 *	22-24	
			TECHNICAL FIELDS SEARCHED (IPC)
			G06K
INCOMPLETE SEARCH			
The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC so that only a partial search (R.62a, 63) has been carried out. Claims searched completely : Claims searched incompletely : Claims not searched : Reason for the limitation of the search: see sheet C			
Place of search		Date of completion of the search	Examiner
The Hague		2 March 2015	Darolti, Cristina
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**INCOMPLETE SEARCH
SHEET C**

Application Number

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Claim(s) completely searchable:
22-24

Claim(s) not searched:
1-21

Reason for the limitation of the search:

In reply to the invitation under R.62a.1, the Applicant indicated that claims 22-24 should form the basis of the search. Consequently, claims 1-21 have been excluded from the search - R.62a.1.

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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02-03-2015

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